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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/643,645 | 08/18/2003 | Charles William Krallman | ROI-4 | 5245 |
| 1473 ROPES & GRA | 7590 03/10/200 AY LLP | EXAMINER | | |
| PATENT DOCKETING 39/361 | | | ROBERTSON, DAVID | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | | | | |
|--|---|-----------------|--|--|--|--|
| Office Action Comments | 10/643,645 | KRALLMAN ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Dave Robertson | 2121 | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | | | | | | |
| 1)⊠ Responsive to communication(s) filed on <u>17 D</u> | ecember 2008. | | | | | |
| | action is non-final. | | | | | |
| | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| · | pance Quayre, 1000 0.21 1.1, 10 | 3 3.3.2.3. | | | | |
| Disposition of Claims | | | | | | |
| 4) ☐ Claim(s) 1 and 3-146 is/are pending in the application. 4a) Of the above claim(s) 19-37, 55-72, 91-109, and 128-146 is/are withdrawn from consideration. 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1,3-18,38-54,73-90 and 110-127 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement. | | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | | |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| Attachment(s) | | | | | | |
| Notice of References Cited (PTO-892) | | | | | | |

Art Unit: 3623

DETAILED ACTION

1. This is a Final office action in response to Applicant's reply of 12/17/2008. Claims 1, 3-18, 38-54, 73-90, 110-127.

Response to Amendment

- 2. Applicant amends claim 38 to correct a misspelling and to address rejection of claims 38-54 under 35 U.S.C. 112, 2nd paragraph. Accordingly, the rejections are withdrawn.
- Applicant amends claims 1-8 to positively recite steps of the method as performed on a computer. Accordingly, the rejection of claims 1-18 under 35 U.S.C.
 101 are withdrawn.

Response to Arguments

4. Applicant's arguments filed 12/17/2008 have been fully considered but they are not persuasive:

Applicant argues all claims are allowable over Desai et al. (US Pat. 6,618,746) for at least the reason that Desai does not disclose an inclusion value or steps for determining an inclusion value as recited in the independent claims. Specifically, Applicant argues that choosing to include or not to include a question in the survey based on conditional branching logic is not the same as determining an inclusion value as recited in independent claims 1, 38, 73, and 110 of the present invention.

Art Unit: 3623

Examiner respectfully disagrees: Broadly, in the art of questionnaire design, inclusion value may be interpreted as a value or benefit of including (or not including) a question in a survey presented to a respondent. Therefore, in Desai evaluating the inclusion of a question based on a previous response as to whether to include the question, is a determination of the value or benefit of including (or not including) the question in the survey to the particular respondent. Moreover, in light of the specification of the instant invention, inclusion value is expressly defined as including values based on conditional branching logic (see Specification, at page 5: "Inclusion values for each survey question may be updated in real-time and may be determined based on, for example, conditional branching logic programmed into the system...or any suitable criteria for determining the inclusion value, or a combination thereof." Therefore, Applicant's argument that Desai cannot teach an inclusion value or determining an inclusion value using Desai's capability to present questions based on conditional logic contradicts Applicant's own disclosure wherein the scope of the term inclusion value specifically encompasses that taught by Desai.

Accordingly, the grounds of rejection over Desai et al. are maintained.

Art Unit: 3623

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

6. Claims 1, 3, 7-9, 14-17, 38, 39, 43-45, 50-53, 73-75, 79-81, 86-89, 110-112, 116-118, and 123-126 are rejected under 35 U.S.C. 102(e) as being anticipated by Desai et al (US Pat. 6,618,746) herein "Desai".

Claim 1

Desai teaches a method for selecting survey questions for inclusion in a survey, including storing survey questions and survey response information provided by survey participants (see Figure 1 and related discussion); determining an inclusion value for each survey question (see columns 4-5: the inclusion value is the determination, yes or no, inherent to the "branching" or "piping" logic of Desai); selecting a stored survey question for inclusion in a survey based on the inclusion value of each survey question (see column 4, line 5-21); and providing the selected survey question to a survey participant (see column 3, lines 40-56; and column 5: "Details of the Client"). Desai teaches a client receiving and presenting the questionnaire on a computer (see Figure 3).

Claim 3

Desai teaches a client receiving and presenting the questionnaire on a computer (see Figure 3) and a computer is a personal computing device.

Art Unit: 3623

Claims 7 and 8

By the client receiving the questionnaire from the server via computer network" (column 3, lines 27-44), Desai teaches both local and remote storage of the survey questions.

Claim 9

Desai teaches the inclusion value of each stored survey question is based on associated conditional branching logic (see column 4 at line 15).

Claim 14

Desai teaches an inclusion value of a survey question based on conditional branching logic (see column 4 at line 15), the branching logic being performed by electronic computer over a computer network in response to survey participants answers to questions immediately preceding. Therefore, it is inherent to Desai that the inclusion value of each stored survey question is determined in <u>substantially real-time</u>.

Claims 15 and 16

Desai teaches as above for claim 9, an inclusion value of each stored survey question is based on associated conditional branching logic (see column 4 at line 15). The inclusion value of a question in which the conditional branching logic selects the question for inclusion is necessarily higher than the inclusion value of an "other" question, not selected by the branching logic. For example, in at least the case of employing binary logic in the conditional branching function of Desai, the inclusion value of the selected question is "1"; the inclusion value of the unselected "other" question is

Art Unit: 3623

zero "0". By the same example, (with respect to claim 16) the *threshold* for inclusion is one "1".

Claim 17

Desai teaches inclusion of questions from a question database based on conditional branching and piping logic, whereby all questions are at least initially to be included, until such time as a survey participant responds to a question controlling the branching or piping logic. Therefore, it is inherent to Desai that all questions are designated a common initial inclusion value for all stored survey questions (i.e. all questions are initially, equally included until determined otherwise).

<u>Claims 38, 39, 43-45, and 50-53</u> recite computer implemented systems for performing the methods of claims 1, 3, 7-9, and 14-17, and are similarly rejected for reasons given above for the respective claim and claim elements.

<u>Claims 73-75, 79-81, and 86-89</u> recite computer-implemented system means for performing the methods of claims 1, 3, 7-9, and 14-17, and are similarly rejected for reasons given above for the respective claim and claim elements.

<u>Claims 110-112, 116-118, and 123-126</u> recite computer program product for performing the methods of claims 1, 3, 7-9, and 14-17, and are similarly rejected for reasons given above for the respective claim and claim elements.

Art Unit: 3623

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 4-6, 40-42, 76-78, and 113-115 are rejected under 35 U.S.C. 103(a) as being unpatentable over Desai et al (US Pat. 6,618,746) as applied under 35 U.S.C. 102(e) above to claim 1.

Claims 4-6

Desai does not expressly teach the survey being provided by various computing devices, namely, a kiosk, a point-of-sale (POS) terminal, or an interactive voice response (IVR) system.

Official Notice is taken that it is old and well known to provide surveys by various computing devices contained or configured as *kiosks* and *point-of-sale terminals*, or by telephone using interactive voice response. It would have been obvious to one of ordinary skill in the art at the time of invention to provide surveys by these various computing devices as this would have provided access to survey participants in a variety of venues by various means (i.e. malls, stores, by telephone), thereby increasing participation in the survey by providing the participant convenient access to the survey device.

<u>Claims 40-42</u> recite computer implemented systems for performing the methods of claims 4-6 and are similarly rejected for reasons given above for the respective claim and claim elements.

<u>Claims 76-78</u> recite computer-implemented system means for performing the methods of claims 4-6, and are similarly rejected for reasons given above for the respective claim and claim elements.

<u>Claims 113-115</u> recite computer program product for performing the methods of claims 4-6, and are similarly rejected for reasons given above for the respective claim and claim elements.

9. Claims 10, 11, 46, 47, 82, 83, 119, and 120 are rejected under 35 U.S.C. 103(a) as being unpatentable over Desai et al (US Pat. 6,618,746), as applied to claim 1 above, and further in view of Choi (US Pat. 6,895,405).

Claims 10 and 11

Desai does not expressly teach wherein the inclusion value of each stored survey question is [or is "based on"] the response variance for each stored survey question.

<u>Choi</u> teaches automated methods for computing the effectiveness of a survey question based on statistical analyses of the responses by computing the response distribution, a measure of the response variance for survey questions. Choi teaches "efficiently computing an effectiveness score" for the express purpose of eliminating questions from a survey questionnaire (see Choi, column 5, line 17-22).

One of ordinary skill in the art at the time of invention would have recognized, given Choi's teaching of computing a survey question effectiveness score using the response variance, with Desai's teaching of a survey system capable of selecting questions based on responses and providing therein a Response Processor (Figure 1) with a Statistical Analysis Engine having a Statistical Package Interface (Figure 4 Item 440), that improving Desai using Choi's method of computing an effectiveness score, would have resulted, predictably, with means to eliminate questions from surveys based on an inclusion value (the effectiveness score).

It would have been obvious to one of ordinary skill in the art at the time of invention to base the inclusion of each stored survey question on the response variance, as this would have eliminated ineffective questions from the surveys, leading to shorter surveys and more meaningful response data.

<u>Claims 46 and 47</u> recite computer implemented systems for performing the methods of claims 10 and 11, and are similarly rejected for reasons given above for the respective claim and claim elements.

<u>Claims 82 and 83</u> recite computer-implemented system means for performing the methods of claims 10-11, and are similarly rejected for reasons given above for the respective claim and claim elements.

<u>Claims 119 and 120</u> recite computer program product for performing the methods of claims 10 and 11, and are similarly rejected for reasons given above for the respective claim and claim elements.

Art Unit: 3623

10. Claims 12, 18, 48, 54, 84, 90, 121, and 127 are rejected under 35 U.S.C. 103(a) as being unpatentable over Desai et al (US Pat. 6,618,746), as applied to claim 1 above, and Smith et al (US Pat. 6,993,495).

Claims 12 and 18 recite an inclusion value based on a *global inclusion value multiplier*, defined by the specification (page 17) as a factor applied to the inclusion values of the remaining questions based on the duration (elapsed time) of the survey, thereby shortening a survey that is taking too long; however, Desai does not teach a global inclusion value multiplier based on the duration of the survey applied to the inclusion value of each stored survey question.

Smith teaches automated methods of conducting online surveys, including reducing the number of questions a respondent must answer at a single time or on a single web page (Smith, column 20, lines 26-36; column 21, lines 41-49). Reducing the number of questions a respondent must answer directly reduces the duration of the survey and leads to increased completions, a desirable outcome of conducting online surveys (see Smith, column 21 from line 9).

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply a global inclusion factor to the selection of questions in Desai for adjusting inclusion of questions in the survey based on the duration of the survey, as increased completions would have been the predictable result of decreasing the number of questions asked, leading to greater numbers of respondents completing surveys, and therefore better data for analysis of the surveyed subject.

Art Unit: 3623

<u>Claims 48 and 54</u> recite computer implemented systems for performing the methods of claims 12 and 18, and are similarly rejected for reasons given above for the respective claim and claim elements.

<u>Claims 84 and 90</u> recite computer-implemented system means for performing the methods of claims 12-18, and are similarly rejected for reasons given above for the respective claim and claim elements.

<u>Claims 121 and 127</u> recite computer program product for performing the methods of claims 12 and 18, and are similarly rejected for reasons given above for the respective claim and claim elements.

11. Claim 13, 49, 85, and 122 are rejected under 35 U.S.C. 103(a) as being unpatentable over Desai et al (US Pat. 6,618,746), as applied to claim 1 above, and further in view of Choi (US Pat. 6,895,405) and Smith et al (US Pat. 6,993,495).

Claim 13 recites wherein the inclusion value of each stored survey question is based on a <u>combination</u> of conditional branching logic, response variance, and a global inclusion value multiplier. For reasons given above, Desai in view of Choi and Desai in view of Smith teach or suggest the respective elements of claim 13, namely, as in claim 9 (branching logic), claim 10 (response variance), and claim 12 (global inclusion) value. However, Desai does not teach the inclusion value <u>based on the combination on elements</u>:

A combination of old elements is obvious when it does no more than yield predictable results. One of ordinary skill would have been recognized that including multiple elements in the inclusion value would improve the overall value for selection of questions for the survey, however, the predictable result of basing the inclusion value for a question on all three of the recited elements would have been merely to base the inclusion value by an amount proportional to each basis taken independently.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to determine the inclusion value based on *conditional branching logic, response variance, and the global inclusion value multiplier*, as this would have lead to improved selection of questions and thus better surveys and resulting data, accordingly to the aims of the survey.

<u>Claim 49</u> recites computer implemented systems for performing the method of claim 13, and is similarly rejected for reasons given above for the respective claim elements.

<u>Claim 85</u> recites computer-implemented system means for performing the method of claim 13, and is similarly rejected for reasons given above for the respective claim elements.

<u>Claim 122</u> recites computer program product for performing the method of claim 13, and is similarly rejected for reasons given above for the respective claim elements.

Art Unit: 3623

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 3623

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dave Robertson whose telephone number is (571)272-8220. The examiner can normally be reached on 9 am to 5 pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dave Robertson/ Examiner, Art Unit 2121

/Albert DeCady/ Supervisory Patent Examiner, Art Unit 2121